

MODIFIED Δ 5-ANDROSTENES HAVING IMPROVED BIOAVAILABILITY

ABSTRACT OF THE DISCLOSURE

The hormone 7-keto-dehydroepiandrosterone (7-keto-dehydroepiandrosterone; Δ 5-androstene 3 β -hydroxy, 17-one; referenced as "7-keto-DHEA") is modified at the 3rd carbon, the 17th carbon, or at both 3rd carbon and the 17th carbons with one or more of the following: tetrahydropyranyl (both mono and di-ethers), 1-methoxycyclopentane (both mono and di-ethers), cyclopent-1'-enyl (both mono and di-ethers), or combinations thereof. This modification improves oral bioavailability and plasma half-life in humans and mammals.